

REMARKS/ARGUMENTS

The Examiner is thanked for the Official Action dated April 27, 2010. This amendment and request for reconsideration is intended to be fully responsive thereto.

Claims 1, 8, 25, 26 and 33 have been amended to recite the at least one hydraulic fluid accumulator. The support for this amendment could be found in page 5, lines 18-21 of the present application. No new matter has been added.

Claims 13, 26 and 28 have been amended to recite the compartment at least partially filled with a hydraulic working fluid. The support for this amendment could be found in page 5, lines 18-21 and Fig. 1 of the present application. No new matter has been added.

Claims 13 and 33 have been amended to correct minor informalities. No new matter has been added.

Claims 1-7, 11, 12, 14-18, 22, 23, 25, 26, 29-31 and 33 were rejected under 35 U.S.C 102 as being anticipated by Hafner et al. (US 4,367,786). The applicant respectfully disagrees.

Regarding claim 1: In order to expedite prosecution of the present application, claim 1 has been amended to include all of the limitations of claims 2, 6 and 7. No new matter has

been added. Consequently, claims 2, 6, 7, 11, 12, 14 and 16-24 have been canceled. Claims 3, 8, 13, 15 and 25 have been amended to change dependency. No new matter has been added.

The Examiner alleges that Hafner discloses all the limitations of claims 1, 2 and 7 as originally filed, recites the elements of the original claims 1, 2 and 7, and broadly refers to drawing figures illustrating the invention of Hafner, and col. 5, lines 25-40 and col. 3, lines 43-53 without defining specifically which elements of the hydrostatic bladder-type storage means of Hafner are interpreted as the enclosed outer casing, the internal tube extending within the outer casing, the cooling passage and the clearance between the internal tube and the hydraulic fluid accumulator. In other words, it is not quite clear which elements of Hafner the Examiner interpreted as the enclosed outer casing, the internal tube extending within the outer casing, the cooling passage and the clearance between the internal tube and the hydraulic fluid accumulator. Thus, in the event that the Examiner maintains this rejection of claim in a future written communication, the Applicant kindly requests the Examiner to point out to a specific place (column, line and the reference numeral) in the '786 patent where Hafner discloses the recited enclosed outer casing, the internal tube extending within the outer casing, the cooling passage and the clearance between the internal tube and the hydraulic fluid accumulator.

Although Hafner discloses hydraulic fluid accumulator, Hafner, contrary to the examiner's allegations, fails to disclose an enclosed outer casing, the internal tube extending within the outer casing, and the cooling passage defined by a clearance between the internal tube and the hydraulic fluid accumulator. In fact, Hafner discloses a hydrostatic bladder-type storage means (hydraulic fluid accumulator) 1 surrounded by a layer 8 of insulating material (see col. 5, lines 27-29 (embodiment of Fig. 1), or alternatively, the insulating layer 8 is in the

form of a hollow cavity or space S (erroneously marked with the reference numeral 5 in Fig. 2) adapted to be traversed by a flowing cooling medium having a uniform temperature (see col. 5, lines 29-33). Please note that the reference numeral 5 depicts in the disclosure of Hafner a foam body that fills the entire bladder 4 (see col. 4, lines 64-68).

While recognizing that the pending claims must be given their broadest reasonable interpretation consistent with the specification, we trust that that the broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach, as stated in MPEP § 2111. Applicant believes that those skilled in the art would not possibly interpret the insulating layer 8 of Hafner as the enclosed outer casing.

Moreover, even if, for the sake of arguments, we interpret the insulating layer 8 of Hafner as the enclosed outer casing, the hydrostatic bladder-type storage means of Hafner does not disclose the internal tube extending within the outer casing, as recited in claim 1. As clearly disclosed and illustrated by Hafner, only the insulating layer 8 surrounds the hydraulic fluid accumulator 1.

Furthermore, Hafner fails to disclose a cooling passage formed within the internal tube and defined by a clearance between the internal tube and the hydraulic fluid accumulator, as recited in claim 1. As noted above, Hafner fails to disclose the internal tube extending within the outer casing. Moreover, Hafner clearly discloses and illustrates that there is no clearance between the hydraulic fluid accumulator 1 and the insulating layer 8. In fact, the hydraulic fluid accumulator 1 is surrounded (without any clearance as shown in Fig. 2) by a hollow cavity or space S, which is part of the insulating layer 8 and is adapted to be traversed by a flowing cooling medium having a uniform temperature (see col. 5, lines 29-33 of Hafner).

Anticipation under Section 102 requires that a prior art reference disclose every claim

element of the claimed invention. *E.g.*, *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1574, 1 U.S.P.Q.2d 1081 (Fed. Cir. 1986). Anticipation must be found in a single reference. *E.g.*, *Studiengesellschaft Kohle, m.b.H. v. Dart Indus., Inc.*, 726 F.2d 724, 726-27, 220 U.S.P.Q. 841 (Fed. Cir. 1984). The absence of any element of the claim from the cited reference negates anticipation. *E.g.*, *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 715, 223 U.S.P.Q. 1264 (Fed. Cir. 1984).

Therefore, Applicant respectfully submits that the applied document, *i.e.*, the '786 patent to Hafner, does not meet this standard of anticipation. Accordingly, the rejection of claims 1, 3, 4, 5, 15 and 25 under U.S.C. 102(b) over Hafner is improper.

Regarding claim 26: Contrary to the Examiner's allegations, Hafner fails to disclose the compartment at least partially filled with a hydraulic working fluid and being in fluid communication with the hydraulic fluid accumulator so as to selectively transfer the hydraulic working fluid between the compartment and the hydraulic fluid accumulator. Even if, for the sake of arguments, we interpret the hollow cavity S of Hafner filled with a flowing engine coolant of a motor vehicle, the coolant in the cavity S is not in fluid communication with the hydraulic fluid accumulator 1. Moreover, those skilled in the art would readily realize that it is unacceptable in the art and impossible to use engine coolant as the hydraulic fluid in hydraulic fluid accumulators.

Furthermore, Hafner fails to disclose a pressurized gas reservoir external to the outer casing, which is in fluid communication with the compartment within the outer casing for pressurizing the hydraulic working fluid within said compartment in the outer casing. The only element of the device of Hafner external to the insulating layer 8 is the element marked

“Cooling Water Circulatory System”. Clearly, the Cooling Water (i.e., liquid) Circulatory System could not possibly be interpreted as a pressurized gas reservoir.

Therefore, the applied document, *i.e.*, the ‘786 patent to Hafner, does not meet this standard of anticipation. Accordingly, the rejection of claims 26 and 29-31 under U.S.C. 102(b) over Hafner is improper.

Claims 8, 9, 13, 19, 20 and 28 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hafner in view of Lawrence (US 3,448,792).

Regarding claim 8: The Examiner concedes that Hafner fails to disclose at least one spiral wrapping between the internal tube and the hydraulic fluid accumulator. The Examiner then alleges that Lawrence discloses the recited spiral wrapping apparently in the form of the heat exchange coils 16, 18. The Examiner further alleges that it would have been obvious to one of ordinary skill in the art to modify the device of Hafner with at least one heat exchange coils 16, 18 of Lawrence to “provide an alternate highly efficient cooling structure for transferring heat between two members”. It appears that the Examiner suggest to replace the insulating layer 8 in the form of a hollow cavity S with the heat exchange coils 16, 18.

First, Examiner’s modification of the Hafner in view of Lawrence is improper because in order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned. In other words, to rely on the reference under 35 U.S.C. 103, it must be analogous prior art. MPEP 2141.01(a). In *re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). Clearly, Lawrence

that discloses a thermal convection (or heat) condenser is not analogous to the claimed invention that recites the pressure vessel assembly for a pressurized fluid system. Thus, since the heat condenser of Lawrence has different purpose and structure, it is in the different field of endeavor, and is not reasonably pertinent, it is non-analogous and cannot be used as the prior art against the present invention.

Second, as argued above, regarding the patentability of claim 1 over Hafner, Hafner fails to disclose an enclosed outer casing, the internal tube extending within the outer casing, and the cooling passage defined by a clearance between the internal tube and the hydraulic fluid accumulator. Moreover, Hafner fails to disclose a cooling passage formed within the internal tube and defined by the clearance between the internal tube and the hydraulic fluid accumulator, as recited in claim 1. Also, those skilled in the art would interpret the heat exchange coils 16, 18 using superheated steam as heat exchange fluid (see col. 2, lines 60-61), as the cooling passage.

Therefore, the rejection of claim 8 under 35 U.S.C. 103(a) over Hafner and Lawrence is improper.

Further regarding claim 9: contrary to the examiner's allegations, Lawrence clearly discloses that the heat exchange coils 16, 18 are made of metal (see col. 3, lines 24-27 of Lawrence), not of an elastomeric material as recited in claim 9. Therefore, the rejection of claim 9 under 35 U.S.C. 103(a) over Hafner and Lawrence is improper.

Regarding claim 13: The Examiner concedes that Hafner fails to disclose a compartment defined within the pressure vessel assembly between the outer casing and the internal tube, which is at least partially filled with a hydraulic working fluid. The Examiner then alleges that it would have been obvious to one of ordinary skill in the art to modify the device of Hafner so that the pressure vessel assembly defines a compartment therewithin between the outer casing and the internal tube, the compartment at least partially filled with a hydraulic working fluid. In other words, the examiner failed to provide any reference teaching the compartment defined within the pressure vessel assembly between the outer casing and the internal tube, which is at least partially filled with a hydraulic working fluid. Moreover, the Examiner erroneously noted that the above modification of Hafner “would provide an obvious modified pressure chamber for immersing fluid accumulators within hydraulic systems”. In other words, the device of Hafner modified as suggested by the Examiner, would provide fluid accumulators immersed within hydraulic fluid. Contrary to the examiner’s allegations, the hydraulic fluid accumulator of the present invention as recited in claim 13 and disclosed in the specification, is located within the internal tube and not immersed in the hydraulic fluid, which is disposed outside the internal tube. Therefore, the rejection of claim 13 under 35 U.S.C. 103(a) over Hafner and Lawrence is improper.

Regarding claim 20: Claim 20 has been canceled, thus rendering this rejection moot.

Regarding claim 28: Claim 28 depends upon claim 26, thus all the arguments regarding the patentability of claim 26 are equally applicable to claim 28, which further define the invention over the prior art.

Claims 10 and 21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hafner in view of Lawrence as applied to claims above, and further in view of Randall (US 4,037,650).

Regarding claim 10: The Examiner concedes that Hafner as modified by Lawrence fails to disclose the pressurized fluid system including a cooling fan providing a forced air flow through the cooling passage. The Examiner then alleges that Randall discloses the recited pressurized fluid system including a cooling fan (38, 39 in Fig. 7 of Randall) providing a forced air flow through the cooling passage. The Examiner further alleges that it would have been obvious to one of ordinary skill in the art to further modify the device of Hafner with a cooling fan of Randall providing a forced air flow through the cooling passage to “increase the heat transfer/cooling efficiency of the pressurized system”.

Examiner’s modification of the Hafner in view of Randall is improper because in order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned. MPEP 2141.01(a). Clearly, Randall that discloses a thermal storage apparatus for storing and transferring heat is not analogous to the claimed invention that recites the pressure vessel assembly for a pressurized fluid system for storing a pressurized fluid. Thus, since the thermal storage apparatus of Randall has different purpose and structure, it is in the different field of endeavor, and is not reasonably pertinent, it is non-analogous and cannot be used as the prior art against the present invention.

Therefore, the rejection of claim 10 under 35 U.S.C. 103(a) over Hafner, Lawrence and Randall is improper.

Regarding claim 21: Claim 21 has been canceled, thus rendering this rejection moot.

Claims 24, 27 and 32 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hafner in view of Lawrence as applied to claims above, and further in view of Eulluin (US 5,402,844).

Regarding claim 24: Claim 24 has been canceled, thus rendering this rejection moot.

Regarding claims 27 and 32: Examiner's modification of the Hafner and Lawrence in view of Eulluin is improper because in order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned. MPEP 2141.01(a). Clearly, Eulluin that discloses an apparatus for ventilating and air conditioning several rooms is not analogous to the claimed invention that recites the pressure vessel assembly for a pressurized fluid system for storing a pressurized fluid. Thus, since the air conditioning apparatus of Eulluin has different purpose and structure, it is in the different field of endeavor, and is not reasonably pertinent, it is non-analogous and cannot be used as the prior art against the present invention.

Therefore, the rejection of claims 27 and 32 under 35 U.S.C. 103(a) over Hafner, Lawrence and Eulluin is improper.

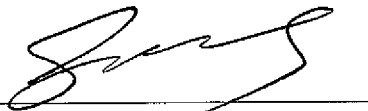
Appl. No. 10/572,908
In re Rose, K.
Reply to Office Action of Apr. 27, 2010

New claims 34 and 35 have been added.

It is respectfully submitted that claims 1, 3-5, 8-10, 13, 15 and 25-35 define the invention over the prior art of record and are in condition for allowance, and notice to that effect is earnestly solicited. Should the Examiner believe further discussion regarding the above claim language would expedite prosecution they are invited to contact the undersigned at the number listed below.

Respectfully submitted:

By: _____



George Ayvazov
Reg. N° 37,483

Berenato & White, LLC
Suite 240
6550 Rock Spring Drive
Bethesda, Maryland 20817
(301) 896-0600